

Ministry
of the
Environment



New Environmental Technology Evaluation (NETE) Program

Promoting the development and application of new environmental technologies

A Guide for Applicants

August, 2000

Ministry of the Environment

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What is the purpose of this program?

The purpose of the NETE program is to assist the development, marketing and application of new environmental technologies. The program is specifically oriented to assist companies with technologies which are new to Ontario but is also applicable to companies wishing to market existing technologies outside of Ontario.

Under the program, the Ontario Ministry of the Environment will assess/evaluate a new technology by reviewing the information and data submitted by an applicant, conducting relevant literature searches on similar technologies and utilizing relevant engineering and technical knowledge/expertise of reviewing engineers and/or scientists.

Following the assessment, a NETE "Opinion Letter of Technology Assessment" or a "Certificate of Technology Assessment," will be issued to the applicant commenting on the technical merits of the technology, its potential to meet jurisdictional environmental standards, and potential areas of application.

The opinion letter or certificate will expedite the engineering review for approval of site-specific application of new technologies in Ontario and will be expected to help build confidence among municipalities and industries on the use of new technologies. The opinion letter or certificate are also expected to greatly assist in the marketing of new technologies both in Ontario and abroad.

What technologies are covered?

The NETE program applies to:

- materials and chemicals which may be used as equipment coatings or in drinking water, water conditioning or treatment and waste water treatment applications; and

- process or pollution control technologies designed to reduce emissions or discharges to the environment or clean up or control contaminants in the environment.

Technologies being targeted are technologies where:

- some or all aspects of a technology's performance are unproven or the long-term performance has not been demonstrated; or
- a technology's performance has been demonstrated and long-term performance data is available (this may include the application of an existing technology for non-conventional uses).

These technologies will likely fall into one or more of the following categories:

- drinking water treatment and supply
- municipal and industrial wastewater treatment
- air pollution prevention and control
- hazardous waste management
- site remediation

Technologies which can benefit the environment but which do not fit into any of the above categories may also be considered for evaluation. If you have a question on whether or not your technology qualifies for a NETE evaluation, please contact the Manager, Technology Standards Section. (See page 7)

NOTE: Fuel additives or innovative technologies associated with performance improvement/enhancement of automotive internal combustion engines do not qualify under this program due to the ministry's inability to assess these types of technology.

What is being evaluated?

The technology will be assessed for its technical merits, performance relative to existing environmental standards in Ontario, its performance claims and its potential areas of application. The review will not include an assessment of architectural, structural, electrical or instrumentation components of the technology nor will it include any assessment of the relative economic viability of the technology.

Note: The ministry will not verify the results of performance tests or other tests conducted on a technology by the owners. Private testing/verification agencies should be used to verify test results.

What do you get?

Under the NETE program, upon completion of a technology assessment, applicants **will receive** a draft copy of either an *Opinion Letter of Technology Assessment* or a *Certificate of Technology Assessment* for review and comment. A final opinion letter **or** certificate will be issued to the applicant **upon** payment of the balance of the fee. (*For details see "How much will it cost?"*)

Both the Opinion Letters and the Certificates will be stand-alone documents. (*Examples of an opinion letter and a certificate can be found in the Appendices*)

Opinion letters will be issued for materials, chemicals, or technologies which are **in the** developmental stage or pilot stage and **for which** limited performance data are available and the technology is unproven in large-scale use.

Certificates will be issued for technologies **for** which substantial performance data **are** available from full-scale demonstration facilities or where the technology has been adequately demonstrated against the performance claims.

How to apply for an evaluation?

To make an application for evaluation of a technology under this program, an applicant needs only to send available information and data on the technology together with a signed copy of the application form at the back of this guide to:

*The Manager
Technology Standards Section
Standards Development Branch
Ministry of the Environment
40 St Clair Ave. W. 7th Floor
Toronto, ON M4V 1L5*

What information should be submitted?

The initial information required should be specific to the technology and, where applicable, should include, as a minimum, the following:

- (a) A detailed description of the technology;
 - scientific basis
 - process flow design
 - general equipment design
 - range of operating conditions
 - types and quantities of waste stream or material to be treated
 - emissions (air, water, solid waste) to the environment
- (b) Details of the chemical formulation of any chemical, coating or construction material, including the Chemical Abstracts Service (CAS) registry numbers, together with any information on the application of the material for similar use elsewhere;
- (c) Details of potential applications for the technology;

- d) Performance data, such as treatment or destruction efficiencies, process emissions, monitoring results and characteristics of byproducts and residuals; and
- (d) Any other reports/assessments of the technology by other jurisdictions or private sector firms.

How is confidentiality ensured?

Any document, study report or letter that is sent to the ministry becomes Crown property and is subject to the provisions of the *Freedom of Information and the Protection of Privacy Act (the Act)*.

Please stamp documents submitted to the ministry as “confidential” if appropriate. This would include any documents or materials which identify a trade secret or provide scientific, technical, commercial, financial or labour relations information that is being supplied in confidence, and where disclosure could be harmful to your competitive position or result in an undue loss or gain to any person or organization. *(For a more detailed explanation, please refer to Section 17 of the Act.)*

Providing documents meet the above tests the ministry will ensure full confidentiality of any documents submitted with an application.

Technologies to be used in Ontario

Under the NETE program, new and innovative technologies which have not been reviewed as part of the application for a site-specific Certificate of Approval in Ontario, can be evaluated and assessed for their potential application in Ontario and the likelihood of satisfying specific Ontario legislative and regulatory requirements. Applications of the technology in Ontario will require separate ministry approval under the *Ontario Environmental Protection Act* or the *Ontario Water resources Act* to ensure its applicability

against site-specific performance and environmental requirements.

If you have received an opinion letter for a technology that is in the development or pilot stage and wish to pursue the establishment of a full-scale demonstration facility in Ontario, you will be required to obtain all necessary MOE approvals for the demonstration facility.

For more information on approval requirements, please contact the local MOE office or the Environmental Assessment and Approvals Branch at (416) 314-8001. Alternatively, information can be obtained by sending an e-mail to GetGuide@ene.gov.on.ca and typing GUIDES-EPA or GUIDES-OWRA.

How long will a NETE evaluation take?

The ministry will make every effort to issue a written opinion letter or certificate within one month after all required information is received. Some applications may be very complex and take more time to evaluate.

If the information provided is incomplete, the applicant may be asked to provide additional information. The evaluation will commence once all the required information is received.

How much will it cost?

A fee-for-service schedule has been established as follows:

- (a) \$500 for an *Opinion Letter of Technology Assessment* for a chemical, chemical coating or construction material for use in the processing, treatment or supply of drinking water;
- (b) \$1500 for an *Opinion Letter of Technology Assessment* for a technology for which no demonstrated large-scale performance data are available; and

- (c) \$2500 for a *Certificate of Technology Assessment* for a technology for which large-scale performance data have been submitted.

An initial fee of \$250 for a chemical assessment and \$500 for a technology assessment is payable to the ministry when an application for evaluation is made. The balance of the fee is payable after the draft letter/certificate has been reviewed by the applicant but before the formal opinion letter or certificate is issued.

Cheques should be made payable to the Minister of Finance, c/o the Ministry of the Environment.

How does this program differ from the federal Environmental Technology Verification (ETV) Program?

The federal ETV program is a nation-wide initiative for the verification of technology performance claims. The Ontario program complements the federal ETV program by assessing new environmental technologies for which there is insufficient data to allow performance verification or where performance verification is not being sought. A technology evaluation under the Ontario program will streamline the approvals process for site-specific new technology demonstrations in Ontario which can be used for collecting data for ETV validation of performance.

If you have any questions or need more information, please contact:

The Manager
Technology Standards Section
Standards Development Branch
Ministry of the Environment
40 St. Clair Ave. W., 7th Floor
Toronto ON M4V 1L5

Tel: (416) 327-5519
FAX: (416) 327-9187

or email us at
Internet: Nete@enc.gov.on.ca

Need more information?

APPENDICES

1. Application Form
2. Example of an Opinion Letter of Technology Assessment
3. Example of a Certificate of Technology Assessment

(Note: Examples of the Opinion Letter and Certificate shown below, differ slightly from the actual)

APPLICATION FORM

Please sign this form and submit it with your application.

The purpose of the Ontario Ministry of the Environment NETE program is to assess new environmental technologies and promote the development and application of viable technologies both in Ontario and abroad. The receipt of an opinion letter or a certificate under the NETE program does not remove or limit the onus on an applicant to obtain any necessary jurisdictional approvals before proceeding to use a technology.

Please note that a technology assessment under the NETE program focuses on anticipated process performance, environmental effects and potential applications of a technology but does not include an assessment of architectural, mechanical, structural, electrical or instrumental components of the technology, nor does it include any assessment of the relative economic viability of the technology.

I hereby declare that I understand the above statements and attest that, to the best of my knowledge, the information and data submitted in support of this NETE application are accurate and truly reflect the performance of the technology.

Name and Company (please print)

Title

Signature

Date (y/m/d)

TECHNOLOGY ASSESSMENT OPINION LETTER

{ INSERT TECHNOLOGY NAME }

The Ontario Ministry of the Environment has reviewed the {insert technology name}. Based on the review of the documentation submitted by the company(see appendix-outline of reports submitted), and the data on laboratory/pilot scale tests conducted by the company, etc. ... the ministry concludes that the {insert technology name} is a potentially technically viable technology for (Substantiate applicants claims)

Review Highlights

- Description of technology and scientific basis for its application (no proprietary information).
- Unique features of the technology
- Claims made by the applicant.
- results of tests submitted by applicant.
- Assessment of viability of the technology for the application in its intended (or other)use.
- recommendation/suggestion for further testing (where applicable).

The Ministry of the Environment trusts that this evaluation will be of assistance in the further development and marketing of this technology. Should you or your clients have any questions regarding our evaluation of the technology, please contact the Manager of the technology Standards Section at: Telephone: (416) 327-5519, Fax: (416) 327-9187.

Yours truly,

Jim Smith
Director
Standards Development Branch

APPENDIX

- List of documents reviewed, etc.

CERTIFICATE

OF TECHNOLOGY ASSESSMENT

{ INSERT TECHNOLOGY NAME }

The Ontario Ministry of the Environment has evaluated the
{ "insert technology name" } for the treatment or ? of...
Based on a review of the data and information submitted in
support of the { "insert technology name" } (see appendix -
outline of reports submitted)...the Ministry concludes that
the { "insert technology name" } is a technically viable
system for the.....

{ substantiate claims of applicant }

Director Standards Development Branch
Ministry of the Environment

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{ INSERT NAME OF TECHNOLOGY cont'd }

Notable aspects of the technology include:

√ The technology has been demonstrated on/at.....

√ The technology makes innovative use of

√ Testing of emissions indicates that

√ The technology is applicable to.....

√ etc.

Appendix

Documents reviewed:

√ A technical report prepared by.....

√ A test report prepared by...

√ A technical paper entitled.....

√ Technology brochure ...

√ etc.

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